STUDY IN THE USE OF AUDIOBOOKS FOR READING IN GIFTED STUDENTS

A Thesis by

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Submitted to the Department of Curriculum and Instruction
and the faculty of the Graduate School of
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Master of Education

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STUDY IN THE USE OF AUDIOBOOKS FOR READING IN GIFTED STUDENTS

The following faculty have examined the final copy of this thesis for form and content, and recommend that it be accepted in partial fulfillment of the requirement for the degree of Master of Education in Special Education, with a major in Gifted Education.

____________________________________
Kay Gibson, Committee Chair

____________________________________
Anh Tran, Committee Member

____________________________________
Jo Bennett, Committee Member
DEDICATION

To Chuck and Marylouise: first and best teachers.
Docendo discit tur - *(Seneca)*
ACKNOWLEDGEMENTS

I would like to acknowledge Dr. Kay Gibson, Dr. Anh Tran, and Dr Jo Bennett, and all the faculty of the education department of Wichita State University, for their wisdom and dedication.

I would also like to thank USD 259 of Wichita, Kansas for its belief and investment in me.
This study explored the question of whether using recorded texts in conjunction with written texts might improve gifted students’ reading comprehension. Participants were thirteen gifted readers from two elementary schools, in grades 1 to 5. Participants alternated reading texts at their reading level with, and without, the aid of audio recordings. Immediately following the reading of the text, participants took a short comprehension test. Participants completed pre- and post- treatment surveys to determine to measure their attitudes towards listening versus reading and how they may have changed during the study. Five participants scored higher using the Read / Listen treatment; four did equally well using either treatment; and four scored better on the Read Only treatment. Participants who scored better on the Read / Listen treatment scored at least a full letter grade higher than with the Read Only treatment.
TABLE OF CONTENTS

Chapter                                      Page

6. INTRODUCTION.................................................................1
   Rapidly Changing Concept of Reading                   1
   Availability of Recorded Texts                        1
   My question                                         1
   Some Characteristics of Gifted Students              2
   Implications of Gifted Characteristics                4
   Purpose of this Study                                4

2. LITERATURE REVIEW ....................................................5
   Majority of Literature concerns General Education    5
   Use With the visually impaired                        5
   Use With Second Language Learners                    6
   Teaching Children with Learning Disabilities         6
   Using Audiobooks to Aid in Comprehension             6
   Audiobooks in the Gifted Classroom                   8
   Four Broad Areas of Literature                       8
   Conclusion                                          9

3. METHODOLOGY ..........................................................10
   Purpose                                             10
   Participants                                       10
   Materials/Instruments                               11
   Procedures                                          12

4. RESULTS .................................................................14
   Results of the pre-treatment survey: Questions 1-12  14
   Test results                                        15
   Results of the post survey: Questions 1-6            16
   Results of the post survey: Question 7               18
   Results of the post survey: Question 8               19

5. DISCUSSION .............................................................20

6. CONCLUSION............................................................23
# TABLE OF CONTENTS  (cont.)

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. FUTURE RESEARCH</td>
<td>24</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>25</td>
</tr>
<tr>
<td>APPENDIXES</td>
<td>28</td>
</tr>
<tr>
<td>APPENDIX A I.R.B research approval notice</td>
<td>29</td>
</tr>
<tr>
<td>APPENDIX B Parent consent form</td>
<td>33</td>
</tr>
<tr>
<td>APPENDIX C Child assent form</td>
<td>34</td>
</tr>
<tr>
<td>APPENDIX D Sample text and test</td>
<td>35</td>
</tr>
<tr>
<td>APPENDIX E Pretreatment survey</td>
<td>36</td>
</tr>
<tr>
<td>APPENDIX F Post treatment survey</td>
<td>37</td>
</tr>
<tr>
<td>APPENDIX G Student observation Form</td>
<td>39</td>
</tr>
<tr>
<td>APPENDIX H Table 4 raw data</td>
<td>40</td>
</tr>
<tr>
<td>APPENDIX I Table 5 Raw data</td>
<td>41</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>Table 1 Results of the pre-treatment survey: Questions 1-12</td>
<td>14</td>
</tr>
<tr>
<td>Table 2 Test results</td>
<td>15</td>
</tr>
<tr>
<td>Table 3 Results of the post survey: Questions 1-6</td>
<td>17</td>
</tr>
<tr>
<td>Table 4 Results of the post survey: Question 7</td>
<td>18</td>
</tr>
<tr>
<td>Table 5 Results of the post survey: Question 8</td>
<td>19</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

Rapidly Changing Concept of Reading

The concept of reading is undergoing rapid change in our society today. More and more people now do a large part of their reading while staring at some sort of computer monitor or handheld book reading device. Along with this change in the nature of printed matter, there is also a great change in the mediums with which we can, and do, get our information. Television and radio have been around for decades, of course, and audio recordings have been with us for a very long time. Many of us can remember listening to recorded comedy performances, dramas or Christmas stories. However, never before have they been available in such profusion, variety, affordability, and in such portability. We have books on tapes, CD’s, MP3’s and computer downloads, at our fingertips.

Availability of Recorded Texts

Thousands of these books can be found for free or very cheaply, and hundreds can be stored on a player device that can fit comfortably in the palm of your hand or clipped to your lapel. The mind ponders the true effects of this cornucopia of sound on the way we live. It is as if literature has spiraled back to something like the age of the medieval bards. People can now not only read a good story, but can become “literate” by having professionals read to them!

My Question

Given that reading, as a visual occupation, needs to remain an important skill for students to learn, my question deals with whether, or not, the addition of audio recordings of a given text
will enhance the quality of the comprehension of students’ reading of that same text. Will the transfer of information through the simultaneous application of sound, in addition to sight, help readers gain more from what they read? A more specific question is; does this sound and sight application offer anything to our gifted readers? Will they be more able to retain information from the texts they read?

Some Characteristics of Gifted Students

Gifted children are often seen as the jewels of our educational system. They are among the ones that bring home the Science Olympiad trophies, they bring up a school’s average test scores to show Annual Yearly Progress (AYP), they are often the children that teachers find most satisfying to teach, and they often become our most celebrated alumni. Gifted students are also most generally good readers. In my school district, USD 259, they must read at least two full grade levels above their regular education peers to qualify in that subject, and often can read three or more grade levels above. It is not uncommon for gifted students in my class to be in the fourth grade and be able to read and comprehend books that are on upper middle school reading lists. Not only this, but they also are often voracious readers who, by fourth grade, have read almost all of the challenging books in the school library.

What complicates the situation is that though these students can read books with which older students might struggle, this skill often masks the fact that their comprehension levels are not commensurate with their decoding skills. Readers often read at a much higher level because they have been able to minimize the cognitive resources needed to decode. However, if they spend a great deal of their cognitive capacity decoding they may not have the capacity left to
make sense of the text. It is, therefore, also common for young gifted scholars to read with great speed, only to shrug their shoulders when asked to explain what it was they just read. This does not mean that these students are not truly advanced. What it often means is though fast readers, they may not be truly fluent readers, lacking appropriately phrased, expressive and meaningful reading. (Resinski, 2003)

The nature of gifted children is that they are often competitive, or at least, sensitive to failure. (Ohio Association for Gifted Children, 2008). When asked to read they may put all their effort into the performance. The words per minute score of most gifted readers is very high, but it is not accurate to equate fast readers with fluent readers (Resinski, 2003). My gifted students often boast that it only took them a couple of days, (or hours,) to read a large Harry Potter book, but then read the same book three or four times. This gives me pause to consider if the child is reading simply at a high rate of words per minute but without reading with true fluency.

Gifted students, though extremely bright, do not necessarily always have the disciplined habits, of the high achiever, in that they often “know” without working hard rather then working hard to “know” (Kingore, 2004). We sometimes seem to act as if, because of their advanced mental abilities, gifted students do not need to be taught cognitive skills, only to be surprised and disappointed when they do not respond to a challenge in a thoughtful or logical fashion. Gifted students need to be taught that comprehension is a cognitive skill they will learn through fluency, and fluency is not just fast reading (Resinski, 2003).

Gifted students also have a tendency to become bored very easily. They tend to focus on things as long as they feel stimulated by the information gained, but soon they flit off to pleasure themselves with some other cerebral stimulus (O.A.G.C., 2008).
Though this may seem obvious, as all students can become bored with their studies, it is different with gifted students. Where an average student may become bored and start to daydream, for example, a gifted student would more likely ask a question that is off topic or ask to do something else, thus signaling that he has mentally moved on (O.A.G.C., 2008)

Implications of Gifted Characteristics

An analysis of gifted characteristics suggests that we need to find ways to encourage gifted readers work on their fluency, so that they will be able to comprehend at a greater depth. Listening to audio while reading not only slows down students’ reading pace, but gives them information in two formats. Thus, I theorized that audio books might be a tool with which gifted students could gain better comprehension.

If students were given texts in print and in audio form, I felt that students could be induced to read and listen at a pace that would allow for more time to contemplate what was read. I also felt that the participants’ listening skills would benefit. The audio recording would pace the student and the listening would allow for less effort in decoding. Students would be able to read for depth of meaning and could hear correct pronunciation of unfamiliar words. I anticipated that this deliberate pacing of the reading combined with opportunity to gain information through an additional sense would produce better results in comprehension.

Purpose of this Study

The purpose of this study was to determine if there would be any increase in reading comprehension among gifted readers if they were allowed to listen to audio recordings of texts as they were simultaneously reading visually. It was felt that easing the amount of effort used in decoding would increase the subsequent comprehension.
CHAPTER 2

LITERATURE REVIEW

Audiobooks in General Education

The greatest portion of the literature on the use of audiobooks in the classroom addresses its use with the general population. Much of what is written concerns use with students to broaden their reading interests (Chen, 2004), heightened pleasure in literature (Austin & Harris, 1999), and the acquisition of a greater understanding of new text structure (Casbergue & Harris, 1996). Other writings showed developed listening skills, improved cognitive skills, greater understanding of dialect text and complex language among audio book listeners (Baskin & Harris, 1995).

Use with the Visually Impaired

There is little doubt that one of the areas of education that has benefited a great deal by the proliferation of audiobooks has been in the education of the visually impaired. In a rather extensive guide, Horton (1988) gives information on the use of many resources including audiobooks for the education of persons with visual impairments. Jahoda (1993) authored a book which deals with the issue of visual disabilities that outlines alternative ways for people with these disabilities to cope and succeed. These works are mentioned here, as vision problems can afflict the gifted just as they can any other student, and can stand in the way of their identification or success. For example, such things as dysgraphia, dyslexia, or binocular insufficiency, can seriously hamper a gifted student reader, decrease their comprehension, and mask their possible giftedness.
Use with Second Language Learners

Second language learners, English speaking students, regular education students, L.D., and struggling readers of various ages have all received benefits from using audiobooks (Johnson, 2003). Vocabulary, listening skills, learning dialects, and pronunciation are among some of the benefits. Audiobooks have been shown to be of special value for second language learners (Beers, 1998; Bliss, Skinner, Adams, & Chafoules, 2006).

Teaching Children with Learning Disabilities.

Audiobooks have shown promise in the process of teaching children who exhibit delays because of learning disabilities (Boyle, et al., 2007). Large gains in confidence and an increase in enthusiasm were also noted (Bradsby, et al., 1993).

Audiobooks to Aid in Comprehension

The question of whether or not audiobooks help comprehension is undecided. It has been shown that as an important part of a comprehensive plan, audiobooks added rigor and relevance among other things to the students’ reading in a program that showed rising scores over a number of years (Brown & Fisher, 2006). Research suggests exploring the potential benefits of using audiobooks in social studies classes and recognizes that literature used in a social studies classroom provides a context for actual events, rather than for literary experience (Carbo, 1992). Others indicated that high interest, high-level reading material recorded in small amounts with a slow pace and short phrases can accelerate the progress of low-level readers (Brown, 2002). Both of these authors indicate that audio textbooks are effective for greater comprehension.

Clark (2001) did not find any difference between those who used audiobooks and those who did not, but listed a significant number of extenuating circumstances why no differences
were shown. The study did find, nevertheless, that audiobooks are a good substitute for the reading of books to children by parents (Clark, 2001).

Although I feel that audiobooks should never supersede the teaching of reading skills, recorded literature is a means of varying the media that students are exposed to and can help unskilled readers key in to word patterns and vocabulary that give them difficulty in the reading process. Carstens (1996) stated that the ultimate goal in the use of recorded literature is to increase the interest and success of students in literature such that they become self-motivated, independent readers.

A definite advantage was found to using audiobooks with students in a secondary setting for understanding and retaining material from novels read in the class (Franklin, 1996). After all is considered, there is need for more research to be done in order to understand the value or shortcomings in the use of audiobooks for retention and comprehension of literature.

A considerable amount of literature discussed how the Internet, digital work, and recorded books are changing the face of literature as we know it and how it is changing the way we read, write, and in a broader sense, how we live. Marshall McLuhan’s, “The Medium is the Message” is happening in reading and literature (Koskimaa, 2007). Books with hyperlinks, e-books with multiple story lines, tag team style written novels, and publishing strictly for the Internet, are just a bit of the brave new world of books. All of this technology challenges educators to keep ahead of what reading means to our students.

Research finds that listening comprehension is positively related to reading comprehension and that a listening test is as effective a predictor of success in reading as a standardized reading test (Hollingsworth, 1968), (Lerkkanen; Raski-Puttonen; Aunola.; Nurmi
(Diakidoy; Stylianou; KarefIllidou; & Papageorgiou, 2004), and (Hagtvet, 2003) and that there is a positive effect on comprehension and language complexity through teacher storytelling and story reading, (Isbell; Sobol; Lindauer; Lowrance; 2004), Audiobooks in the Gifted Classroom

Only one study was found that was somewhat related to the topic of using audiobooks in the gifted classroom. For proficient readers, audiobooks present opportunities to develop comprehension skills and strategies in critical and creative thinking (Wolfson, 2008).

It may be assumed that researchers feel gifted students can read well enough already, so see no need for doing this kind of research. If this is the reason, I found no literature on this topic with which one could argue the point. However, it is also possible that because of pressures of The Elementary and Secondary Education Act of 1965, which puts so much emphasis on raising the scores of regular education students that gifted education remains an area that is not adequately studied.

Four Broad Areas of Literature

The research and writing that are prevalent in the area of audiobooks in the classroom encompasses four broad areas. First, studies of recorded materials as used with children or persons with vision loss, and as an aid for students who are learning disabled. Second, recorded literature is used as an aid to students who are learning English as a second language. Third, some literature supports the use of audiobooks as an aid in making reading more attractive for students, and as an aid in broadening the reading choices of students. Fourth, a great deal of literature supports the use of audiobooks as an aid in developing listening skills, and as an aid to
developing all reading skills, especially comprehension, among students in the regular classroom.

Conclusion

A review of the current literature leads to the conclusion that while there is a quantity of written material on the use of audiobooks in the classroom, none was found that directly addressed their use as a tool to increase comprehension among gifted students.

The challenge of this study was to explore a small part of the under-researched landscape of gifted education. I wanted to research the value to gifted students of listening, in conjunction with reading, as an aide to increasing comprehension.
CHAPTER 3

METHODOLOGY

Purpose

The purpose of this study was to determine if there would be an increase in reading comprehension among gifted readers when they were allowed to listen to audio recordings of the texts as they were simultaneously reading visually. I wanted to see if there was a difference in comprehension after a listening plus reading intervention, as compared to when participants just read the texts visually. It was believed that easing the amount of effort used in decoding would increase the subsequent comprehension.

Participants

Thirteen elementary students from the gifted programs of two schools, (referred herein as School A and School B,) acted as participants for this study. There were nine potential participants from School A and six potential participants from School B. IRB approval for the study was received, (Appendix A). All of the potential participants filled permission forms, (Appendix B & C). All received permission from their parents, but three of these potential participants declined to participate.

One of the three students that I have listed as a non-participant did indeed, finish all of the essays and their corresponding tests. This student however, was finished in just a few days and when I investigated, I found that the results were very poor. When questioned, the student admitted that the tests were completed without much effort, some of them having not been read completely, and without many of the essays having been read at all. The student confided that
after starting he lost interest in the project but was too embarrassed to back out. Realizing that this student had finished the project just to get through it, his results were not used.

The thirteen participants consisted of: one fifth grade boy; one fifth grade girl; three fourth grade girls; five third grade boys; two second grade girls; and one first grade boy. All of the participants had reading levels that were at least two levels above their grade.

Materials/Instruments

In this study I intended to gain quantitative data in order to measure whether audiobooks would help the low relative levels of comprehension that I had observed in my class. Just as important, I also wanted qualitative data to further the development of theories to explain the events I had observed during the study. I planned this as Grounded Theory research, (Patten, 2007), that is, research grounded on observations. Grounded Theory research is often thought of as evolutionary; it is developed during the making of observations and can be revised as new observations are necessary. Thus, this was a quasi-experimental study made up of both qualitative and quantitative components. There was no control group. The participants all served as the treatment group and as their own control group. Validity and reliability were reinforced by the fact that there was a large number of treatment applications, twelve for each treatment, twenty-four in all, (Appendix D); both pre- and post-treatment surveys, (Appendixes E & F); and a systematic teacher observation throughout the study (Appendix G).

Any study such as this is limited by the fact that there is naturally an abundance of variables that might come into play, and a small group of participants. With this in mind, the study was designed to give each participant treatments that were at least two grade levels a head of their actual grades; with all treatments being given in a consistent manner.
Several collections consisting of 24 essays each, corresponding to the advanced instructional levels of the students gathered from various sources were used as the reading texts (Appendix D). Subject matter was a wide selection, with varied genres. Copies of each essay were printed and recorded audio files of half of each level grade level collection were made. The audio was created through the use of text to voice conversion software. This ensured a consistent voice and reading style for each recording. Each essay was accompanied with a short test with varied question types, (true/false, multiple choice or short written answer), both within each test, and among the tests. Each of these short tests had between six and eight questions.

In addition to the essays and the recorded essays, there was a pre-treatment survey and a post-treatment survey (Appendix E and F), designed to qualitatively explore the participants’ attitudes and experiences. The pre-treatment survey consisted of twelve questions with three choices for answers. This survey was designed to procure a picture of the students’ basic preferences towards reading vis-à-vis visual and audio reading, quality of reader’s voice, or type of text. This post-treatment survey consisted of eight questions designed to measure the participants’ attitudes about the read and listen treatment. Six questions queried the participants about their feelings relative to the audio treatment, and the last two questions were short essay questions pertaining to the participants’ likes and dislikes towards the audio recordings.

Finally, I created a student observation form (Appendix G) with a checklist describing level of activity, attention, effort/motivation, relationship with teacher and peers, and temperament during the completion of the treatments. The form also included a space to record observed behaviors that may relate to the relative success or failure of task completion.

Procedures
Before the commencement of the study, I received approval from the WSU Institutional Review Board (see Appendix A) to proceed with the research upon receipt of the consent form for the parents (Appendix B) and the child assent form (see Appendix C). Once consent forms had been returned, the participants were given the pre-treatment survey, (Appendix E), and the results were tabulated. Results helped to establish baseline information concerned with the students’ preferences toward visual and audio reading.

During the next three weeks, the participants were given the twenty-four essays (Appendix D). Half were to be read-only, and half were to be listened to while being read. All of the essays and CD recordings were used during class time in the gifted classroom. After reading and/or listening to each piece, the participants took the test that corresponded to each essay. The participants were allowed to ask the definition of any word and were able to look up words in a dictionary under. During the study, no requests for a definition were made by any of the students.

Simultaneous to the application of the reading and the reading/listening treatments, I completed systematic observations as the students worked (Appendix G). It was noted how the students did their tests, their apparent attitudes, how long each treatment took, and any special differences between the approach they used depending on whether or not they were listening. After all the treatments were completed, the students exited the study by filling out the post survey (Appendix F). The data received from the last two statements on the survey was aggregated and compared with each other.
CHAPTER 4

RESULTS

Results of the pre-treatment survey indicated that the participants were generally positively pre-disposed towards the idea of listening as an aid to comprehension, or at least neutral. There was no real preference for a male or female voice, and largely neutral attitudes regarding human vs. computer voice, except that among those who had a preference, the human voice was the clear favorite. The overall sense was that the participants, had a good idea what they were about to do, were eager, and amenable to the project and what was expected of them.

Table 1
Results of the pre-treatment survey: Statements 1-12 \((N=13)\)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Yes / True</th>
<th>No / False</th>
<th>Don’t know / No opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like it when a story is read to me:</td>
<td>9</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>I like to listen to recorded stories:</td>
<td>8</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>I think I remember better if I hear it:</td>
<td>4</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>I think I remember it better if I read it:</td>
<td>6</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>When I am read to I prefer: Male voice</td>
<td>1</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>When I am read to I prefer: Female voice</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>When I am read to I prefer: Don’t care</td>
<td>8</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>I have read many audio books:</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>I prefer listening to: Human voice</td>
<td>6</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>I prefer listening to: Computer voice</td>
<td>6</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>I prefer listening to: Doesn’t matter</td>
<td>8</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>I like narrative text the best:</td>
<td>3</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>I like persuasive text the best:</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>I like expository text the best</td>
<td>0</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>I like fiction more than factual:</td>
<td>9</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>I like to read text books:</td>
<td>1</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>
The last 5 statements in Table 1 pertained to the types of texts the students preferred to read. In four of the statements, the opinions of the students as a group were either flat or neutral. However, the majority of the participants (9 out of 13) preferred fiction to factual reading material.

Table 2
*Results of the Read-only and Read / Listen treatments in percents of correct answers (N=13)*

<table>
<thead>
<tr>
<th>Participant:</th>
<th>Read Only treatment</th>
<th>Read and Listen treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>First grader 1</td>
<td>74%</td>
<td>88%</td>
</tr>
<tr>
<td>Second grader 1</td>
<td>72%</td>
<td>77%</td>
</tr>
<tr>
<td>Third grader 1</td>
<td>64%</td>
<td>78%</td>
</tr>
<tr>
<td>Fourth grader 1</td>
<td>80%</td>
<td>85%</td>
</tr>
<tr>
<td>Fifth grader 1</td>
<td>66%</td>
<td>84%</td>
</tr>
<tr>
<td>Third grader 2</td>
<td>81%</td>
<td>77%</td>
</tr>
<tr>
<td>Third grader 3</td>
<td>74%</td>
<td>71%</td>
</tr>
<tr>
<td>Third grader 4</td>
<td>91%</td>
<td>88%</td>
</tr>
<tr>
<td>Fourth grader 2</td>
<td>87%</td>
<td>82%</td>
</tr>
<tr>
<td>Second grader 2</td>
<td>92%</td>
<td>92%</td>
</tr>
<tr>
<td>Third grader 5</td>
<td>75%</td>
<td>74%</td>
</tr>
<tr>
<td>Fourth grader 3</td>
<td>79%</td>
<td>79%</td>
</tr>
<tr>
<td>Fifth grader 2</td>
<td>87%</td>
<td>86%</td>
</tr>
</tbody>
</table>

The essays and the tests were completed in about three weeks. The teacher observations showed that the students completed the work with vigor and industry. Most participants seemed
interested in the texts, and were generally self motivated enough to get the work done; fitting it in between other classroom activities. The participants worked utilizing various strategies. Some would underline passages that they thought would be important, others took pains to read the questions of the tests prior to reading. Others answered the questions as they came to the appropriate information in the text, as they had control to start or stop the CD.

As can be seen in Table 2, five participants scored better with the listen/read treatment, (a little more than 1/3 of the group); four participants, or a little less than 1/3 of the group, scored the same, (± 1%) and four scored better on the Read Only treatment, (a little less than 1/3 of the group.) The five participants who scored better with the listen/read treatment did so by: 14%; 5%; 14%; 5%; and 18%; an average of about 11 %. The participants who scored better on the Read Only treatment did so by: 4%; 3%; 3%; and 5%; an average of 4 %. 
The responses in Table 3 indicate that the participants like listening to recordings, especially if it is done with a real or realistic human voice; the computer voice was not very popular, but in the end the participants were still positive about listening to recorded materials.

Table 3

Results of the post survey: Statements 1-6  (N = 13)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>I liked listening to the recorded stories</td>
<td>9</td>
</tr>
<tr>
<td>Listening to the recordings helped me understand the stories</td>
<td>4</td>
</tr>
<tr>
<td>I think I remember better if I just read it</td>
<td>7</td>
</tr>
<tr>
<td>I liked the voice on the recordings</td>
<td>4</td>
</tr>
<tr>
<td>I prefer listening to a recording of a real human voice</td>
<td>9</td>
</tr>
<tr>
<td>I plan to listen to recorded stories in the future</td>
<td>7</td>
</tr>
</tbody>
</table>
One reason given by participants for positive reactions was the feeling that the recordings served either as fun or as a labor saving device (Table 4). In either case, the point of the exercise might possibly have been missed.

Table 4

<table>
<thead>
<tr>
<th>Type of response</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nothing</td>
<td>2</td>
</tr>
<tr>
<td>Didn’t have to actually read could just listen</td>
<td>4</td>
</tr>
<tr>
<td>Listening was helpful</td>
<td>4</td>
</tr>
<tr>
<td>The experience was funny or entertaining</td>
<td>4</td>
</tr>
<tr>
<td>Unclear response</td>
<td>1</td>
</tr>
</tbody>
</table>

The two “nothing” replies were a bit surprising as it was felt that listening would be a very innocuous activity. In addition, of the two participants who answered “nothing”, one did the same in both treatments and the other did better in the listen and read treatments.
Table 5

Results of the post survey:

Statement # 8  This is what I did not like about using the recorded stories (N = 13)

<table>
<thead>
<tr>
<th>Response</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nothing</td>
<td>3</td>
</tr>
<tr>
<td>Boring</td>
<td>3</td>
</tr>
<tr>
<td>Voice quality</td>
<td>4</td>
</tr>
<tr>
<td>Listening was not helpful or got in the way</td>
<td>3</td>
</tr>
</tbody>
</table>

Question # 8 asked the participants to respond to any negative thoughts or feelings they might have had about the Read / Listen treatment. In the responses it is clear that participants not liking the voice quality (N=4), and finding the listening to be boring (N=3), stood out. There were three responses where little or nothing negative was found.

In the observations (Appendix G), it is interesting to note that those that did better in the listening treatment were more likely to display certain positive traits. Those that did better in the listening treatment were more likely to work at an appropriate level of activity, to stay on task, work independently, work at a reasonable pace and begin work immediately. Those who did not do better in the listening treatment were more likely to be lethargic, not understand directions, work slowly, need individual attention, and have problems with daydreaming. All participants equally likely to listen to instructions, try hard, try hard to please, be cooperative, and be happy.
CHAPTER FIVE

DISCUSSION

Modern technology is most often expected to find and provide easy solutions to persistent problems. The intent of this study was no different. I hoped that students who could decode well, but who read with a lower level of comprehension, might use this process to allow them to comprehend more of what they read thereby gaining more from their reading efforts. I also hoped that the process of listening would improve the participants’ interest in the material and heighten their enjoyment of the texts as mentioned in the literature review (Carstens, 1996; Austin & Harris, 1999). If computer software and easily recorded texts could be used to help gifted students gain a higher comprehension of their reading, and increase their interest and pleasure, it would allow for a much greater utilization of these students’ talents. The results of the study were, however, somewhat short of dramatic. It seemed that the scores appeared to be a bit low overall, as these were all very good readers and no one complained that what they were asked to read was too challenging.

As found in the literature, (Clark, 2001), the study was only able to show mixed benefit towards comprehension. Results showed that indeed, about 40% (5 out of 13) of the participants did do better with the Read / Listen treatment, scoring about a half, to two letter grades higher. Of the other 60% (8 of 13) of participants, half (4) did equally well in the two treatments, scoring within ±1% on both treatments, and the other four who scored higher scores in the Read Only treatment did so by only a very small percentage. Indeed, it is significant to note that those students who scored higher in the Read Only treatment, on a five letter scale (A, B, C, D, F,)
would all have scored the same grade on both treatments. It is felt that any intervention that allows 40% of the class to do better but does little or nothing to deter the rest of the class can be considered helpful. Furthermore, it would be relatively easy to identify those students for whom this intervention would be helpful and include this in their individualized instruction. With this in mind it seems reasonable to conclude that administering an extensive learning styles inventory to each child would help identify those who would be most helped by an audio intervention of this type.

Use of this intervention would need to be supervised carefully. A number of the participants in this study seemed to use the recordings as a crutch that would allowing them to not actually read the texts. Using the recordings as a crutch, it seems, defeats the purpose of the intervention. It does, however, seem possible that this might help students to hone their listening skills. As the literature showed, listening comprehension is positively related to reading comprehension (Hollingsworth, 1968; Lerkkanen et al, 2004; Diakidoy et al, 2004; and Hagtvet, 2003), and therefore, might have a secondary effect on reading comprehension.

One result that stands out is the question of voice quality in the recordings. The participants, by and large, did not seem to enjoy the computerized voice (Table 5). and there were several comments aired that the voice, in fact, was distracting. Software for turning text to speech needs to improve. Until then one would need to use human recorded materials as much as possible. In addition this study was not able to explore all of the possible voice software because of cost. Voices that were a great deal more expensive may be better.

The fact that some of the participants expressed that they found the listen intervention boring (Table 5), is not troubling. I noted during observations that the participants spent a great
deal of their time being bored because, as they expressed, the novelty of what they were doing had worn off. They were ready to move on. Sometimes their boredom was expressed when they felt that they were not doing a good job. They would make comments like, “I can’t do this, it’s boring” or “I’m not good at this, it’s boring!” Part of the process of teaching gifted students, as well as all students, is to help them to understand that we enjoy doing those things that we do well, and tend to find boring those things that we do not do well. They need to realize that sometimes a bit of drudgery is necessary in order to develop our skills. Once these skills are developed they will enjoy doing it more fully. Nothing could be more harmful to gifted students than to allow them to flit from activity to activity with little consistency of disciplined follow through.

On the other hand, there is a need to make learning as engaging as possible. These students always want to know why they are doing something, and will not accept a vague answer. This can be handled well by showing students the large picture. When they are given intelligent explanations they are often more willing to comply. In this case, by giving them texts that are of some interest to the students, and explaining the purpose of the listening portion of the intervention, they are more likely to respond more positively.
CHAPTER SIX

CONCLUSION

Gifted students like all other students today are tested frequently throughout their school career. Gifted students however, are also pressured to perform at higher levels. As a consequence, these children often become very blasé about taking tests. When taking tests they tend to race through them and may or may not be concerned with how well they do. This attitude may have played a part in the results that were gathered, and scores may have been adversely affected.

Nevertheless, when comparing the results of the more than one third (5) of participants who did better with the Read / Listening treatment with the results of the third (4) of the participants who did better in the Reading Only treatment, we see that the first group averaged 11% better in their higher scores, which was 7% higher than the average best scores of the other group (Table 2). This indicates that the use of recorded materials for reading comprehension has some place in the classroom. It shows that at least one third of the participants of this study could benefit from this intervention; and since gifted students all have individual learning plans, the use of audiobooks could well be incorporated into their curriculum to their advantage. Additionally, it was shown that students are open to listening and many find it an enjoyable way to take on new and broader knowledge.
In the future I plan to continue to research the use of audiobooks in the classroom. Over time, refinements in the types of materials available to the teacher may contribute to a more definitive answer to the question of, if or how, the use of recorded texts can help gifted students gain more from their reading. The fact that my students are a small group and that they range widely in grade, will continue to make the design of any future study difficult. Perhaps I could meet with fellow gifted teachers and develop a plan that would allow me to include their students as participants. Across the district there are enough gifted students to make my research sample a great deal larger. This larger sample size would make my study stronger.

One possibility would be to try a book study where one group of participants would read the book and another group of participants would read and listen to a professionally recorded book. Perhaps I could create a study where a college student in the dramatic arts department could do the recordings for me. The student could then use them for his portfolio. No one book would suffice for all the possible participants. It might necessitate as many as four or five books. Implementation of class discussions would be complicated, unless I was able to do one grade at a time, or incorporate this research into each individual’s I.E.P. in such a way that I could work with each student individually.

Another important consideration would be to administer a learning styles inventory to the participants with which I could determine whether auditory or visual learning was preferred by each participant. I could then see if the results were related to preferred learning styles.
List of References


WWW.OAGC.com (2003, April 26, 2009). What to expect when you're Parenting a Gifted Child *What to expect when you're Parenting a Gifted Child* Retrieved April 26, 2009
APPENDIXES
APPENDIX A

IRB research approval notice

WICHITA STATE UNIVERSITY
Office of Research Administration

Date: March 9, 2009
Name: Kay Gibson/John Simkins
Department: Curriculum and Instruction
RE: IRB #1458

The University Institutional Review Board (IRB) has reviewed your research project application entitled:

"Study in the use of Audiobooks for Reading in Gifted Students"

and approved the project as provided in the Federal Policy for the Protection of Human Subjects. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

Please keep in mind the following:

1. Any significant change in the experimental procedure as described should be reviewed by the IRB prior to altering the project.
2. When signed consent documents are required, the principal investigator must retain the signed consent documents for at least three years past completion of the research activity.
3. At the completion of the project, the principal investigator is expected to submit a final report; the form is attached.

Thank you for your cooperation. If you have any questions, please contact me at ext. 5742.

Sincerely,

Alicia Huckstadt, Ph.D.
Chairperson, IRB
APPENDIX B

Consent Form

CONSENT FORM

PURPOSE: Your student is invited to participate in a study of the use of audio recordings as an aid to reading comprehension. I/we hope to learn whether or not the simultaneous listening to audio recordings of literature and the reading of the same literature can help the reading comprehension of gifted readers.

PARTICIPANT SELECTION: Your student was selected as a possible participant in this study because he/she is a member of Mr. Simkins’ Gifted class.

EXPLANATION OF PROCEDURES: If your student decides to participate, he/she will be asked to respond to a selection of essays, after having read to some and having listened and read to others. They will also be asked to respond on one pre- and one post-survey. Students will be given a collection of essays, some they will read, some they will read while they listen to an audio recording of those essays, (24 in all for each student,) and will be tested on their comprehension of the material just read. After the tests are completed, they will be graded, and the difference in scores between the essays read and essays read and listened to, will be compared. Students impressions and feelings about the use of audio will also be measured.

DISCOMFORT/RISKS: There are no discomforts or risks connected with this study. There will be no anticipated risks or discomforts anticipated with this study.

 BENEFITS: It is hoped that through this study we might gain greater insight into the use of recorded literature for greater comprehension among gifted students. If we can use audio recordings of text to assist in achieving a gain in
comprehension we would not only help the gifted learner but possibly all learners as well. It is hoped that we will learn how much listening to what we read helps us comprehend what we read. It is also hoped to see whether or not gifted learners in particular can benefit from listening while reading. It is also part of this study to see what students’ attitudes might be towards the use of audio while reading.

CONFIDENTIALITY: Any information obtained in this study will remain confidential. All participants’ identities will be kept secret to be identified only, (if ever,) with the use of alpha-numeric codes.

REFUSAL/WITHDRAWAL: Participation in this study is entirely voluntary. Your decision whether or not to participate will not affect your future relations with Wichita State University and/or Unified School District 259. If you agree to have your child participate in this study, you are free to withdraw your child from the study at any time without penalty.

CONTACT: If you have any questions about this research, you can contact me at: Mr. John Simkins, 312 Hunton Road, Eldorado, KS 67042 (316) 320-1178. Also you can contact Dr. Kay Gibson, Wichita State University, 1845 Fairmount, Wichita, KS 67260-0028; telephone (316) 978-569.). If you have questions pertaining to your rights as a research subject, or about research-related injury, you can contact the Office of Research Administration at Wichita State University, Wichita, KS 67260-0007, telephone (316) 978-3285.

You are under no obligation to participate in this study. Your signature indicates that you have read the information provided above and have voluntarily decided to participate.

You will be given a copy of this consent form to keep.

___________________________________________________ _______________________
Signature of Subject        Date

___________________________________________________ _______________________
Signature of Parent or Legal Guardian        Date

(omit for subjects consenting for themselves)

___________________________________________________ _______________________
Witness Signature        Date
APPENDIX C

Child Assent form

CHILD ASSENT FORM

I have been told that my parents (mom or dad) have said it’s okay (or, have given permission) for me to participate, if I want to, in a project about reading comprehension.

I know that I can stop at any time I want to and it will be okay if I want to stop.

____________________________________________________________________

Name                      Date
Have you ever had an idea that didn't quite turn out the way you intended when you put it to the test? That "surprise" element is something an inventor is very familiar with. A case in point is Leo Szilard (1898 - 1964) who patented the idea of a nuclear chain reaction in 1934. Though Leo Szilard came up with the idea and helped the U.S. government create the first atomic bomb, he was adamantly against using it on moral grounds. Despite his repeated pleas, the U.S. government dropped two atomic bombs in Japan in 1945 and effectively ended World War II.

Leo Szilard was certainly neither the first nor the last inventor whose product was being used in a way different from its initial design. Looking back in history, there are two Chinese inventions that can attest to that statement. The duo is the compass and gunpowder.

The earliest-known compass dates from China during the Warring States Period (475 B.C. - 221 B.C.) At the time, people used an instrument called "Sinan" for fortune telling and other spiritual applications. A Sinan consisted of two components. The first, top part was a metal spoon made of loadstone. The second, bottom part was a square bronze plate with markings pointing to twenty-four different directions. Because loadstone aligned with the Earth's natural magnetic field, the spoon's handle would always point to south when placed on the plate. The ancient Chinese quickly realized the potential application of this direction-finding devise. So they began to work on improving its stability. The compass of later days had a magnetized needle on a round plate. Its first recorded use as a navigation tool on ships was during the Northern Song dynasty (960 A.D. - 1127 A.D.)
The invention of the compass was not well known to the rest of the world until Zheng He came along. Zheng He was a royal envoy of the Ming dynasty (1368 A.D. - 1644 A.D.) He made seven ocean voyages between 1405 and 1433. His Treasure Fleet, consisting of more than 30 ships and 30,000 men, went to places as far as today's Somalia in eastern Africa. Through his expeditions, Zheng He opened up trade routes for China. Through his expeditions, he built diplomatic relations with other countries. And of course, through his expeditions, he showed the usefulness of a compass in marine navigation. Caught up by the idea, Christopher Columbus used a compass for his journey in 1492. He sailed from Spain and traveled west. After being at sea for about 70 days, he finally reached land. He thought the land was India, his final destination. But it was not. The land Christopher Columbus discovered was America!

Gunpowder is a mixture of sulfur, saltpeter, and charcoal. While the three ingredients are safe enough by themselves, the compound is not. If set on fire, the concoction can produce a powerful explosion. Chinese alchemists tumbled upon this combination in the 8th century as they experimented with ways to prolong life. Shortly after the discovery, the Chinese military began to use gunpowder in warfare. They made several new weapons. For example, they created rockets by launching gunpowder from bamboo tubes. They shot arrows tied with packets of igniting gunpowder.

Gunpowder was introduced to the Arab world during the 13th century. Then, it made its way to Europe sometime during the 14th century. Ironically, though the Chinese invented gunpowder, they never fully utilized it to its potential. They restricted themselves to using it more for firework displays than for military combats. The Chinese's lack of interest in developing new applications for gunpowder was a costly mistake. When Europeans came to China in the 19th century demanding free trade, they attacked China with cannons and other weapons using, what else, gunpowder!
APPENDIX D (Continued)

Name _____________________________

Date ___________________

1. Who invented the compass?
   - The Koreans
   - The Spaniards
   - The Chinese
   - The Japanese

2. What was the original purpose of the compass?
   - To prolong life
   - To cure illness
   - To tell fortunes
   - All of the above

3. When did Leo Szilard patent his idea of a nuclear chain reaction?
   - 1945
   - 1954
   - 1934
   - 1943

4. What dynasty was Zheng He from?
   - The Northern Song dynasty
   - The Ming dynasty
   - The Yuan dynasty
   - The Warring Period
5. What was the original purpose of gunpowder?

To kill enemies
To tell fortunes
To prolong life
To find directions

6. Which of the following about gunpowder is INCORRECT?

The ancient Chinese called gunpowder “Sinan.”
Gunpowder is a mixture of three ingredients -- saltpeter, charcoal, and sulfur.
Gunpowder was introduced to the Arab world during the 13th century.
Though the Chinese invented gunpowder, they didn't use it as extensively in military as the Europeans.

7. What Chinese dynasty had the first written record of using the compass on ships?

The Northern Song dynasty
The Northern Zhou dynasty
The Northern Wei dynasty
The Northern Qi dynasty

8. How many directions could a Sinan point out?

48
28
24
20
APPENDIX E

Pre-survey

Pre-Survey

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1) I like it when a story is read to me.</td>
<td><strong>Date___________</strong></td>
<td><strong>Name___________</strong></td>
</tr>
<tr>
<td></td>
<td>Yes ☐</td>
<td>No ☐</td>
</tr>
<tr>
<td>2) I like to listen to audio books or recorded stories.</td>
<td>Yes ☐</td>
<td>No ☐</td>
</tr>
<tr>
<td>3) I think that I remember better if I hear it.</td>
<td>Yes ☐</td>
<td>No ☐</td>
</tr>
<tr>
<td>4) I think I remember better if I read it.</td>
<td>Yes ☐</td>
<td>No ☐</td>
</tr>
<tr>
<td>5) When I am read to, I prefer:</td>
<td>A male voice ☐</td>
<td>A female voice ☐</td>
</tr>
<tr>
<td>6) I read, or have read many audio books.</td>
<td>Yes ☐</td>
<td>No ☐</td>
</tr>
<tr>
<td>7) I prefer listening to:</td>
<td>A recorded human voice ☐</td>
<td>A “human like” computer voice ☐</td>
</tr>
<tr>
<td>8) I like Narrative text the best:</td>
<td>True ☐</td>
<td>False ☐</td>
</tr>
<tr>
<td>9) I like Persuasive text the best:</td>
<td>True ☐</td>
<td>False ☐</td>
</tr>
<tr>
<td>10) I like Expository text the best:</td>
<td>True ☐</td>
<td>False ☐</td>
</tr>
<tr>
<td>11) I like Fiction more than Factual:</td>
<td>True ☐</td>
<td>False ☐</td>
</tr>
<tr>
<td>12) I like to read Text books:</td>
<td>True ☐</td>
<td>False ☐</td>
</tr>
</tbody>
</table>
APPENDIX F

Post Survey

Date ____________      Name______________

Post Survey

8) I liked listening to the recorded stories. Yes ☐  No ☐  No opinion ☐

9) Listening to the recordings helped me understand the stories better. Yes ☐  No ☐  Don’t know ☐

10) I think I remember better if I just read it. Yes ☐  No ☐  Don’t know ☐

11) I liked the voice on the recordings: Yes ☐  No ☐  No opinion ☐

12) I prefer listening to a recording of a real human voice Yes ☐  No ☐  No opinion ☐

13) I plan to listen to recorded stories in the future Yes ☐  No ☐  No opinion ☐

14) This is what I liked about using the recorded stories:

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

15) What I didn’t like about using the recorded stories:

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
APPENDIX G

STUDENT OBSERVATION FORM

Student: ______________________________ Grade: ________ Date: ____________
Teacher/Observer: ______________________________
Activity: ____________________________ Time Observed: ______________________
Area of activity: [ ] Reading & Listening [ ] Reading

Describe:

Level of Activity
__ Hyperactive
__ Appropriate
__ Lethargic/Tired

Attention
__ Listens to instructions
__ Understands directions
__ Does not understand directions
__ Able to stay on task
__ Easily distracted
__ Able to work independently
__ Understands concepts presented
__ Does not understand concepts
__ Waits for others to initiate
__ Interrupts others

Effort / Motivation
__ Tries Hard
__ Gives up easily
__ Careless in work
__ Works at reasonable pace
__ Eager to please
__ Hesitant to begin working
__ Apathetic/Indifferent
__ Works slowly
__ Races through work
__ Begins work immediately

Relationship with teacher
__ Cooperative
__ Withdrawn
__ Seeks attention
__ Needs individual attention
__ Refuses follow instructions

Relationship with peers
__ Hitting, poking, talking, distracting peers

Temperament:
__ Happy
__ Unhappy
__ Depressed/withdrawn
__ Angry/hostile
__ Anxious
__ Daydreams
__ Confused
__ Easily upset

39
Appendix H

Raw Data Table 4

Results of the post survey: Question 7  (N = 13)

#7 -This is what I liked about using the recorded stories:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>enter the questions without recording</td>
</tr>
<tr>
<td>2nd</td>
<td>That you do not have to get tired and forget where you are, (in the text).</td>
</tr>
<tr>
<td>2nd</td>
<td>Reading the story with a voice, (while) also reading it</td>
</tr>
<tr>
<td>3rd</td>
<td>Nothing</td>
</tr>
<tr>
<td>3rd</td>
<td>The stories were easy to read</td>
</tr>
<tr>
<td>3rd</td>
<td>I could answer the questions while listening to the story</td>
</tr>
<tr>
<td>3rd</td>
<td>You actually hear what you're reading</td>
</tr>
<tr>
<td>3rd</td>
<td>I didn't have to read</td>
</tr>
<tr>
<td>4th</td>
<td>Nothing really</td>
</tr>
<tr>
<td>4th</td>
<td>Putting the head phones on and dealing with a CD player</td>
</tr>
<tr>
<td>4th</td>
<td>How the guy on the (recorded) story said funny stuff like “South Caroliiiina”</td>
</tr>
<tr>
<td>5th</td>
<td>I liked it because it read to me while I (tried to) find the answer</td>
</tr>
<tr>
<td>5th</td>
<td>I didn't have to read it myself</td>
</tr>
</tbody>
</table>

The meaning of some responses was unclear, so after conferring with the participants, some words have been inserted in parentheses for clarification.
Table 5

Results of the post survey: Question 8  (N = 13)

<table>
<thead>
<tr>
<th>#8 – This is what I did not like about using the recorded stories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st grader</td>
</tr>
<tr>
<td>2nd grader</td>
</tr>
<tr>
<td>2nd grader</td>
</tr>
<tr>
<td>3rd grader</td>
</tr>
<tr>
<td>3rd grader</td>
</tr>
<tr>
<td>3rd grader</td>
</tr>
<tr>
<td>3rd grader</td>
</tr>
<tr>
<td>3rd grader</td>
</tr>
<tr>
<td>4th grader</td>
</tr>
<tr>
<td>4th grader</td>
</tr>
<tr>
<td>4th grader</td>
</tr>
<tr>
<td>5th grader</td>
</tr>
<tr>
<td>5th grader</td>
</tr>
</tbody>
</table>

* The meaning of some responses was unclear, so after conferring with the participants, some words have been inserted in parentheses for clarification.